24 April 1962

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MEMORANDUM FOR: Chief, Technical Plans & Development Staff

THROUGH:

Acting Chief, Technical Development Branch

SUBJECT:

Image Correlator

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- The correlator was inspected by myself and spent a further two days working with the machine. It is an extremely fine piece of equipment, and whilst the controls are not perfect in human engineering concepts, they are functional and accurate.
- It is, however, very apparent to me that optimum efficiency in operational use will only be achieved by continuous operator use and knowledge of what the correlation indicators mean. The correlation is achieved by alignment in pairs, using the same master throughout a series of eight correlations. It is indicative of the machine's performance that, whilst the optical alignment as indicated on the screen looked perfect, in all the tests I carried out the electronic alignment always indicated a slight mis-match which had to be corrected. There is probably a improvement factor in the electronic indication versus optical indication in terms of accuracy and alignment. 25X1A

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- I discussed operational evaluation with and have asked are best suited to them to propose an evaluation program. I am sure do this as they are thoroughly familiar with the machine. Such work would indicate results that could be expected from a wide range of inputs and would result in a full operator manual showing not only mechanical operation but also operational possibilities and limits.
  - Inputs for such a program would consist of:
  - Ground pictures which we would supply, taken under many varying conditions and with different films and cameras.

Aerial pictures utilizing the

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be operational in June/July.

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**Declass Review by NIMA/DOD**